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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/537,546	03/30/2000	Knut Beneke	31659-157399	7765

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EXAMINER

LE, BRIAN Q

ART UNIT PAPER NUMBER

2623

DATE MAILED: 04/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/537,546

Applicant(s)

BENEKE, KNUT

Examiner

Brian Q Le

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, and 7 is/are rejected.
- 7) ☒ Claim(s) 4-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krug U.S. Patent No. 5,838,758 and Berger U.S. Patent No. 6,230,174.

Referring to claim 1, Krug teaches a method of processing an X-ray image of articles (Abstract) contained in a transilluminated object and made visible (column 13, lines 55-67 and column 14, lines 1-15) for an observer on a monitor screen (FIG. 1, element 9), comprising the following steps:

(a) placing individual markings about the image or certain, previously determined articles (FIG. 9A-9C and column 30, lines 17-29);

Krug does not teach the concept of automatically and stepwise combining the individual markings into a final added marking if at least two individual markings mutually fit; said combining step comprises the steps of

(1) comparing for fit mutually facing sides of two adjoining individual markings; and

(2) determining a ratio of an overlapping area of said two adjoining individual markings to the total area of at least one of said two adjoining individual markings.

Berger discloses an image arrangement which performs the step of automatically and stepwise (column 3, lines 40-47) combining the individual marking (bounding rectangle) into a final

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added marking if at least two individual markings mutually fit (FIG. 7A-7D); said combining step comprises the steps of

(1) comparing for fit mutually facing sides of two adjoining individual markings (column 5, lines 49-56); and

(2) determining an overlapping area of said two adjoining individual markings to the total area of at least one of said two adjoining individual markings (column 5, lines 56-67; column 6, lines 1-7).

Modifying Krug's method of method of processing an X-ray image of articles according to Berger will provide the ability to automatically combine individual markings into a final added marking for the overlapping areas within the image. This would improve processing e.g. allow enhanced detection of objects and therefore, it would have been obvious to one of the ordinary skill in the art to modify Krug according to Berger.

Also, Berger does not disclose the concept of determining a ratio of an overlapping area of said two adjoining individual markings to the total area. The Examiner takes Official Notice that the step of determining a ratio of said overlapping area of said two adjoining individual markings with the total area of one of the two adjoining individual markings is well known. This would allow enhanced detection of objects and therefore it would have been obvious to utilize this feature in Krug.

Referring to claim 2, Krug teaches the method wherein said comparing step comprises the step of comparing lengths and positions of said facing sides (column 6, lines 14-18).

For claim 3, Krug does not teach the method wherein said step of determining a ratio comprises the step of determining a ratio of an overlapping area of two adjoining individual

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markings with the total area of one of said two adjoining individual markings. The Examiner takes Official Notice that the step of determining a ratio of said overlapping area of said two adjoining individual markings with the total area of one of the two adjoining individual markings is well known. This would allow enhanced detection of objects and therefore it would have been obvious to utilize this feature in Krug.

Referring to claim 7, Berger teaches the method wherein said comparing and determining steps include the steps of comparing coordinates (column 5, lines 1-8) in which said individual (column 5, lines 38-48) and individual added markings are positioned (column 1, lines 59-62; column 4, lines 50-53; and column 6, lines 21-36).

*Allowable Subject Matter*

3. Claims 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*CONCLUSION*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to luggage inspection and image overlapping processing:

U.S. Pat. No. 5,594,768 to Fujii, teaches laminograph, inspection and repair device using the same.

U.S. Pat. No. 6,473,487 to Le, teaches method for physical characteristics discrimination of objects using a limited view three dimensional reconstruction.

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U.S. Pat. No. 6,084,984 to Ishikawa, teaches overlapping image processing method.


U.S. Pat. No. 5,793,901 to Matsutake, teaches device and method to detect dislocation of object image data.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Q Le whose telephone number is 703-305-5083. The examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC Customer Service whose telephone number is 703-306-0377.

BL  
April 21, 2003

  
Jon Chang  
Primary Examiner